Game Design Document

# Game Overview

## Game Summary

Space Invaders is a fixed shooter game. The player controls a laser that moves left and right at the bottom of the screen. Aliens move left and right across the screen in an 11 by 5 block and descends each time hitting the wall.. Each alien is worth different points depending on how high up they are. The aliens shoot back at the player so we provide four barriers between you and the enemy. Each time a barrier is shot, the more damaged it gets. Pick different strategies to destroy the aliens and see which one succeeds in winning the game.

## High Concept (Elevator Pitch)

We want Space Invaders to be a fixed shooter type game. The goal is to shoot all the aliens before they reach the player.

# Gameplay

## Game Flow

When the player starts the game, they will see the main menu with a black background. There is the title for space invaders in its iconic font, ‘Space’ being in all white and ‘Invaders’ being in lime green. Below that each alien is shown listed vertically with an equal sign between what points they are worth. Going from ten, twenty, thirty, to the red spaceship worth ??? points. Below are the words ‘Play Space Invaders’ in all white which is the button you press to play the game. Then you automatically start the game with the laser directly under the first barrier.

## Victory Condition

The player wins when all the aliens are destroyed before they reach the bottom of the screen. The player has three lives and loses a life each time they get hit by an aliens blast. They lose if they lose all three lives or when the aliens reach the bottom. After winning the game automatically restarts.

## Asset List

<https://docs.google.com/spreadsheets/d/1tkSYe8tgTJUUW9bkxJRqJfK4ZuZ2hD2kwdOGyXkqdxc/edit?usp=sharing>

# History Research

In 1978, Space Invaders was released by Taito in Japan. The main developer, Tomohiro Nishikado, took inspiration from Atari’s *Breakout* for the gameplay and *The War of the Worlds* and *Star Wars* for the setting. The aliens were originally supposed to be human soldiers, but Taito decided to change them to aliens to avoid promoting violence between humans

Space Invaders was a near-instant hit. In 1980, the game was licensed for use in the US, and was ported to the Atari 2600, the NES, and arcades. The game managed to generate over 500 million dollars in revenue. As such, Space Invaders is widely considered to be one of the games that managed to turn video games into a global industry.

Because of Space Invaders worldwide popularity, they soon added more to the game including multiple levels and power-ups. They even included final bosses that made the game even more challenging, making people more determined to get a top score.

# Schedule

Trello: https://trello.com/b/1qTsyE8Q/space-invaders-group-project

## Milestone 1 - Alpha

A demo with the ability to move the laser cannon around and shoot.

2-26

## Milestone 2 - Beta

The ability to move around and shoot the laser cannon. Moving enemies, reskins

2-27

## Milestone 3 – Release Candidate

[Describe what state the game should be in and list all the assets, code, art, etc. that should be done at the end of day/milestone three.]

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